



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,677	12/28/2001	Daniel Tatarka	05788.0180	4632

7590 08/14/2003

Finnegan, Henderson, Farabow,
Garrent & Dunner, L.L.P.
1300 I Street, N.W.
Washington, DC 20005-3315

EXAMINER

BARBER, THERESE

ART UNIT

PAPER NUMBER

2882

DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

C16

Office Action Summary	Application No.		Applicant(s)	
	10/035,677		TATARKA ET AL.	
	Examiner		Art Unit	
	Therese Barber		2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 8, 10, 11, 14-17, 19 and 21 is/are rejected.
- 7) ☒ Claim(s) 5-7, 9, 12, 13, 18 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The informal drawings filed in this application are acceptable for examination purposes. When the application is allowed, applicant will be required to submit new formal drawings. In unusual circumstances, the formal drawings from the abandoned parent application may be transferred by the grant of a petition under 37 CFR 1.182.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 4, 8, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Cooper et al. (USPN 4,550,976).

4. Regarding claims 1, 3, 4, 8, 10 and 11, Cooper discloses an optical fiber cable comprised of a central strength member (8; fig. 1); a buffer tube stranded around the central strength member, the buffer housing at least one optical fiber (4); a first conduit (7) configured to receive at least one first blown optical fiber and positioned external to the central strength member (col. 2, lines 34-46); an outer jacket positioned at the periphery of the optical fiber cable (2); wherein the central strength member is solid (col. 2, lines 20-27); wherein an inner jacket (3) is positioned inside the outer jacket and surrounds at least the central strength member and the

Art Unit: 2882

buffer tube (col. 2, lines 56-58); wherein the first conduit (7) is positioned inside the inner jacket (fig. 1); wherein the central strength member includes reinforcing elements (col. 2, lines 20-27); and wherein a water blocking layer surrounds the central strength member (9).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper and Sutehall (WO 02/12943 A1).

7. Regarding claim 2, Cooper discloses an optical fiber cable comprised of a central strength member (8); a buffer tube stranded around the central strength member, the buffer housing at least one optical fiber (4); a first conduit (7) configured to receive at least one first blown optical fiber and positioned external to the central strength member (col. 2, lines 34-46); and an outer jacket positioned at the periphery of the optical fiber cable (2; fig. 1).

Cooper fails to disclose that the central strength member includes a bore configured to receive at least one central blown optical fiber.

Sutehall discloses an optical fiber cable comprised of a central strength member that is tubular (page 4, lines 20-22), wherein the tubular central strength member reduces the weight per unit length of the cable while increasing its stiffness and the distance to which a cable may be blown (page 5, lines 1-6). In addition, Sutehall discloses that the tubular central strength

Art Unit: 2882

member can accommodate a tube that housing a plurality of optical fibers (130), empty tubes that have an optical fiber blown into the empty tubes, thereby, increasing the number of the optical fibers in the cable without increasing its diameter (140); or electrically conductive member that is accommodated within and extends along the length of the passage (150; page 5, line 16 to page 6, line 9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the optical fiber cable with its central strength member as disclosed by Cooper to include the tubular central strength member as disclosed by Sutehall. Accordingly, the resultant structure will have a tubular central strength member that can accommodate an increase in the number of optical fibers in the cable without increasing its diameter, thereby, making the optical fiber cable more cost-effective.

8. Claims 14, 16, 17, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper and Sadler (EP 0 454 405 A2).

9. Regarding claims 14, 16, 17, 19 and 21, Cooper discloses an optical fiber cable comprised of a central strength member (8); a buffer tube stranded around the central strength member, the buffer housing at least one optical fiber (4); a first conduit (7) configured to receive at least one first blown optical fiber and positioned external to the central strength member (col. 2, lines 34-46); an outer jacket positioned at the periphery of the optical fiber cable (2; fig. 1); wherein the central strength member is solid (col. 2, lines 20-27); wherein an inner jacket (3) is positioned inside the outer jacket and surrounds at least the central strength member and the buffer tube (col. 2, lines 56-58); wherein the first conduit (7) is positioned inside the inner jacket

Art Unit: 2882

(fig. 1); wherein the central strength member includes reinforcing elements (col. 2, lines 20-27); and wherein a water blocking layer surrounds the central strength member (9).

Cooper fails to disclose wherein a conductor of electrical energy is stranded around the central strength member.

Sadler discloses an optical fiber duct for receiving optical fiber member(s) wherein the duct is formed of plastic material that is electrically conductive or has an electrically conductive material applied to the plastic material, in order, to dissipate the static electrical build-up (col. 1, lines 56 to col. 2, line 3; col. 2, line 40 to col. 3, line 27). Sadler discloses that during the installation of optical fibers by blowing, a static electrical charge builds up on the inside wall of the duct, impeding the progress of the optical fiber (col. 1, lines 21-32).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the optical fiber cable with its central strength member as disclosed by Cooper to include the electrically conductive material as disclosed by Sadler. Accordingly, the resultant structure will have a central strength member surrounded by an electrically conductive material that can dissipate the build-up of static electricity.

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper and Sadler as applied to claim 14 above, and further in view of Sutehall.

11. Regarding claim 15, combination of Cooper and Sadler disclose an optical fiber cable comprised of a central strength member surrounded by an electrically conductive material; a first conduit configured to receive at least one first blown optical fiber and positioned external to the

Art Unit: 2882

central strength member; and an outer jacket positioned at the periphery of the optical fiber cable.

Cooper and Sadler fail to disclose that the central strength member includes a bore configured to receive at least one central blown optical fiber.

Sutehall discloses an optical fiber cable comprised of a central strength member that is tubular (page 4, lines 20-22), wherein the tubular central strength member reduces the weight per unit length of the cable while increasing its stiffness and the distance to which a cable may be blown (page 5, lines 1-6). In addition, Sutehall discloses that the tubular central strength member can accommodate a tube that housing a plurality of optical fibers (130), empty tubes that have an optical blown into it, thereby, increasing the number of the optical fibers in the cable without increasing its diameter (140); or electrically conductive member that is accommodated within and extends along the length of the passage (150; page 5, line 16 to page 6, line 9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the optical fiber cable with its central strength member as disclosed by Cooper and Sadler to include the tubular central strength member as disclosed by Sutehall. Accordingly, the resultant structure will have a tubular central strength member that is electrically conductive and can accommodate an increase in the number of optical fibers in the cable without increasing it diameter, thereby, making the optical fiber cable more cost-effective.

Allowable Subject Matter

12. Claims 5-7, 9, 12-13, 18, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 5-7, 9 and 12-13, the prior art fails to teach or to reasonably disclose an optical fiber cable comprised of a central member, a buffer tube stranded around the central strength member, wherein the first conduit positioned outside the inner jacket, wherein the first conduit can receive one or more blown optical fibers, the outer strength member that is parallel to the central strength member and inside the outer jacket, and the second water blocking layer located between the outer strength member and the central strength member, as set forth in the claimed combination.

Regarding claims 18 and 20, the prior art fails to teach or to reasonably disclose an optical fiber cable comprised of an electrical conductor surrounding the central strength member; wherein the first conduit positioned outside the inner jacket, wherein the first conduit can receive one or more blown optical fibers, the outer strength member that is parallel to the central strength member and inside the outer jacket, and the second water blocking layer located between the outer strength member and the central strength member, as set forth in the claimed combination.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Therese Barber whose telephone number is (703) 306-0205. The examiner can normally be reached on Monday to Friday from 8:30 a.m. to 6:00 p.m..

Art Unit: 2882

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Glick can be reached on (703) 308-4858. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-4857 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4900.

tb 
August 9, 2003



DAVID V. BRUCE
PRIMARY EXAMINER